REMARKS

This is in response to the Official Action of July 27, 2005. First, the rejections set forth under 35 U.S.C. §112 are believed to have been overcome by the amendments to claims 14 and 17, respectively.

Reconsideration of the rejection on the prior art is respectfully requested.

By way of explanation, the present invention relates to a hoist carried lift frame member having a load carrying lift slide that can move a limited amount against the force of a spring as the hoist raises the frame member until the load that is being hoisted extends the lift slide a selected amount. A stop will stop the lift slide from extending and will mechanically support the weight of the load on the lift slide, through the frame member to the hoist. The spring force will keep a lift hook on the lift slide engaged with a load even though the load may hang up (or be supported) at an intermediate position as the frame member is lowered.

The spring keeps the load engaged by maintaining the spring load on the lift slide if the frame member continues to lower after the load is supported, until the lift slide is in a fully retracted positive relative to the frame member. The sliding of the lift slide gives an operator a visual indication that the load is hanging up prematurely. The frame member will move down relative to the lift slide if the load is supported independently until the lift slide reaches its retracted position. Also, the frame member moves relative to the loaded lift slide as the frame member is raised and the spring extends, until the lift slide reaches its stopped position. The movement of the frame relative to the loaded lift slide, with the load supported independently is between the lift slide retracted and the stopped position.

When initially raising a load the spring resiliently apply a force to the lift slide so that as the guide member and the lift frame raise, the lift slide and load will remain supported in the initial position until such time at the stop on the lift slide engages and then there is mechanical lifting action that directly lifts the load. The reverse is true when the load is supported and the hoist continues to lower the frame, in that before the lift slide releases the load the frame member has to lower a sufficient amount so that the lift slide is fully retracted relative to the guide member. At this time, the load can be released.

The spring loaded lift slide provides a "heaving" action that is desirable when hoisting beams, trusses, and other loads. There is a positive engagement between the load support on the lift slide and the lifted load until a deliberate release by the hoist operator.

The Office Action rejected claims 1-6, 9, 10 and 15 under 35 U.S.C. §102(b) as being anticipated by Kaplan patent 2,959,411. The Office Action stated that Kaplan disclosed a shock absorbing lifting assembly, and the hoist that would be attached to the hook was in Hooker patent 2,695,809 which is incorporated by reference into the Kaplan '411 patent. The Kaplan '411 patent clearly shows a clam shell load hook that is power driven to a closed or clamping position, but has a link providing small amounts of spring loading in a closing or horizontal direction for accommodating shock loads and the like when the hook is being closed.

Reference to FIGS. 3, 4 and 5 of the Kaplan '411 patent will show that the components which are called the "guide 114", and a "lift slide 108" in the Office Action in fact are shock absorbing links that react only to horizontal forces when closing the hook. The lifted load does not cause a sliding of the shock absorbing link as the load lifts. There is a spring 86, and there

is a limit of the amount that the spring can compress, but all of these components are for absorbing shock loads on the closable lifter jaws. The action of lifting a load under gravity does not,. cause item 108 to slide relative to the member 114, in that this movement could release a lifted load.

In other words, the lifter jaws in the '411 patent are closed with a motor, and the spring link 108, 114 will permit some spring load for shock load absorption for the direct motor drive that closes the jaws. The spring arrangement will only absorb shock from loads on the inside or outside of the jaw structure during outward or inward swinging movements of the jaws or in other words when opening or closing the jaws, by use of a drive motor. There is no extension of a slide through the link in the jaws when the load is lifted.

Referring to column 5 of the Kaplan '411 patent, at approximately line 20, there is a description of the ability of the jaws to move should they become wedged between opposed adjacent objects, and internal shock load caused by the wedging is compensated as described starting at about line 50 of that column 5.

Specifically, independent claim 1 of this application has been amended to more clearly indicate that the guide that is recited, is "raisable and lowerable with the frame assembly by a hoist when a load is to be lifted". While the linkage mechanism shown in the Kaplan '411 patent is raisable and lowerable because it goes up and down with the jaw, it does not have a lift slide that is slidably mounted for movement along a central axis and a stop to limit the lift slide from moving relative to the guide under gravity on a load carried by the lift slide when the lifted frame member and the guide are lifted by a hoist.

In fact, if the spring elements in the Kaplan '411 patent were designed to yield when a load was being lifted,

because of gravity acting on the load, the yielding would be related to pivoting of the jaws and not the load.

If a load carried by the Kaplan '411 jaws hung up at an intermediate position, there would be no "heaving". Thus, it is respectfully submitted that claim 1 is directed toward an entirely different arrangement, and that it has the ability to permit "heaving" of a load as it is raised and lowered. Claim 1 has structure insuring that the load will be lifted by the lift slide only through the biasing member (spring) that resiliently loads the lift slide until the mechanical stop engages. Then, there is a mechanical connection so that the hoist will directly lift the load carried on the lift slide.

If the load does hang up as it is being lowered, the connection between the lift slide and the load will remain under a resilient force as the frame member and guide lower until the lift slide reaches its retracted position. The load hook would not tend to disengage while under this spring load of claim 1.

Claims 2 and 3 add features to the arrangement of claim 1. Claim 2 makes it clear that the pivotally mounted yoke forming the frame member that is mounted about a horizontal axis will ensure that the force line acting on the lift slide will be vertical, which is the lifting direction. The tubular sleeve ensures that the lift slide is held for guided movement.

Claim 4 positions the biasing member on the inside of the tube that comprises the lift slide, so it is not entirely exposed in the retracted position of the lift slide, and claim 5 indicates that the biasing member is an extension spring.

Claim 6 includes the feature that the lift slide has a load support frame that includes a load support surface to engage the load. It is this surface that remains in contact with the load while the biasing member is extended, or retracted as the load slide moves between its retracted and stopped position. This feature is certainly not taught in any of the references. In

particular the Kaplan '411 patent does not indicate any movement of parts directly affected by the load being lifted or lowered.

Claims 7 and 8 add features to the load support frame that comprises the lift slide, for providing a support frame that will lift a beam.

Claims 9 and 10 add details to the tubular lift slide, and the sleeve that holds the lift slide with the spring inside the sleeve, and more specifically defines to the stop.

Claims 11-14 add further details relating to the load support frame and the load support surface on that frame, which does slide relative to the guide member as the hoist raises and lowers the guide member and the frame. It is believed these claims are allowable with claim 1.

Independent claim 15 also has been amended to clarify the fact that the extension of the load slide occurs when the load is lifted, and not from external horizontal force or shock load on a load clamp. Claim 15 includes the feature of the lift slide being adapted to lift a load when the frame member and guide are lifted. In fact, in the Kaplan '411 patent, the parts the Examiner has labeled as a lift slide are not used to lift the load when the frame member and guide are lifted. Those parts are only to absorb shock loads on the pivoting load clamp members. Further, claim 15 has been amended to indicate that the biasing member resists extension of the lift slide from gravity on a load carried by the lift slide, as the frame and guide member are raised. This gives the direct spring loaded lifting action on the lift slide until the stop is engaged, at which time there is a positive mechanical connection to lift the load. Thus, claim 15 is believed allowable in light of the discussion of the Kaplan '411 patent above.

The features of claims 16, 17, 18, 19 and 20 are also believed to be allowable with claim 15 for the reasons of record.

Claims 1-3, 6, 7, 9, and 15-17 were rejected as being anticipated by the Kaplan U.S. Patent 3,086,808. The Kaplan '808 patent also discloses an assembly that does not in any way cause a lift slide to move relative to a hoisted frame as a spring is loaded when a load carried on the lift slide is being raised.

The Kaplan '808 patent discloses a latch member that will hold a horizontally extending leg of a lift assembly in working position and which can be moved to release the leg. The leg on the lift assembly is to be used for lifting metal.

The Examiner has indicated the Kaplan '808 patent had a guide 102, a lift slide 100, a biasing member 104 resiliently loading the lift slide to move the slide in a direction toward a retracted position, and a stop 112 that limited this from moving in its retracted position. However, if the Examiner will review the construction of the Kaplan '808 drawings, it can be seen that what is termed a lift slide 100 is in fact a latch dog that will hold pivoting part 88 in a horizontal position. The specification of the Kaplan '808 patent indicates that there are "foot members 80" shown in FIG. 4, that can close upon each other to underlay a stack of flat sheet metal stock, and these foot members include the ears 88, which in turn guide the foot members for pivotal movement between two positions. The '808 patent specification, in column 4, line 65 and following over to the top portion of column 5, shows that the items that the Examiner has indicated as being a "lift slide" are called latch members or pins 100 that are normally urged toward an advanced latching position by means of coil springs 104, so that they will go into the openings 92 and hold the "foot" members in a particular position.

The pins 100 are cam-operated latches that will automatically retract in the manner as stated at the top of column 5 of the '808 patent, lines 6-10. They clearly latch pins that "may be automatically retracted in the usual manner of latch operation prior to entry of the latch pins into the holes 92.

Each latch pin is provided with a manipulating handle or lever 114 by which the latch pin may be manually moved to a retracted position when desired".

There is nothing in the Kaplan '808 patent that teaches, suggests, or in any way relates to the use of a lift slide for hoisting a load, and which, when a hoist is operated will not be lifted until the lift slide has moved away from a retracted position in which it is held by a biasing member to engage a stop (assuming that the load is great enough to stretch the biasing member to the stop position). The stop then provides a mechanical lift connection to the load. The use of a latch for holding a pivoting member in its workable position or releasing it to a non-workable as shown in the Kaplan '808 patent does not anticipate or suggest the structure of any of the present claims.

The claims, again, have been amended so that claim 1 specifies to the use of a lift slide which connects to a load and which moves against the force of a biasing member as the guide for the lift slide is raised, until a stop is engaged at which time the load can be lifted by the hoist directly. Thus, claim 1 and its dependent claims are believed allowable for the reasons of record above. Likewise, claim 15 defines the ability of a lift slide to move as a load is lifted, against the force of a biasing member until a stop is engaged at which time the hoist will directly lift the load.

Further, it is respectfully submitted that claims 8, 19 and 20 that were rejected as being unpatentable over Kaplan '808 in view of Pierre are allowable for the reason of record. The Kaplan patent does not show a hoist assembly using a lift slide operating as the direct load lifting member that will slide relative to a support guide until a stop is engaged. The addition of Pierre patent teaching to Kaplan '808 patent does not suggest the combination of these claims, since the basic Kaplan reference has been shown to be a latch and remote from the claims.

Claims 11-14 were rejected as unpatentable over Kaplan '808 in view of the Hooker et al. patent, and again the basic reference, Kaplan '808 fails to teach or suggest the inventions of the independent claims, and it is thus believed that the dependent claims 11-14 are allowable. It should also be noted that the features of claims 11-14 are not shown in the Hooker patent, in that the features of claim 11-14 are for adjusting the size and configuration of the load support surface, and Hooker et al. is a mechanical clamping member that has pivoted side frame members that move inwardly to clamp onto a load or a device, with parts that go underneath the load. The pivoting members in present claims 11-14 are pivoting load positioning fingers that will change the configuration of the load supporting surface on the lift slide lifting frame. The swinging jaws that are power operated as in Hooker et al. do not show or suggest pivoting load positioning stops for a load support surface.

Claim 18 was rejected as being unpatentable over the Kaplan '411 patent in view of Camp. Camp, as pointed out, is a fish handling tool with a tubular sleeve and a spring, and it is respectfully submitted that there is little if any analogy between the Camp patent and the present structure. The spring is for weighing fish. In any event, the Kaplan '411 patent does not show or suggest parent claim 15 for the reasons outlined above. Adding the Camp patent to Kaplan '411 does not meet the features of claims 15 and 18.

If the Kaplan '411 device was modified by Camp et al., so there was an indicia, it would only show how much shock absorbing movement there was of the jaws in Kaplan '411 when the jaws were subjected to shock loads, and would have nothing to do with keeping the load hook against the load that is being lifted against the force of gravity.

New claim 21 sets forth a combination of the hoist which provides the vertical force for lifting the load against

gravity, and the features of the lift slide, the frame member being lifted, the guide, the biasing member and the stop, all incorporated into this claim to provide the construction as defined above. Claim 21 is thus allowable for the reasons set forth in connection with claims 1 and 15.

Favorable action is respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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